Annual Plan of Work and Budget (POWB) Template for CRPs for 2016

Name of the CRP: Forests, Trees and Agroforestry

Led by CIFOR

Official start date of the CRP (as per its PIA): 1 JULY 2011

This Program of Work and Budget 2016, has been developed under the assumption of a minimum window1-2 allocation of USD 14.5 million and the actual database of w3/bilateral actions either ongoing or with very high chances to materialize in 2016 for a total of USD 44.1 million. FTA 2016 stands therefore at USD 58.6 million. This represent a difference of about USD 41 million (60% reduction in w1/2 and a 30% reduction in W3/bilateral) compared to the extension proposal approved by the Consortium Board and the Fund Council. Our overall capacity to fully deliver is therefore significantly impacted, especially by the shortfall in w1/2.

We plan a 12% minimum for gender relevant or specific actions and about 8% for capacity development (part of which is gender relevant and therefore the two percentages don't add.

A. Narrative of major planned work (2 pages/1000 words maximum)

The **Management Support Unit** continues streamlining processes towards more efficiency in portfolio management, work towards a results-based management (RBM) approach allowing for research that cannot be rationalized within a narrowly defined RBM system and coordinating the submission of the FTA 2 full proposal. The **Monitoring Evaluation and Impact Assessment** continues its efforts towards an improved impact culture within FTA; activities are better designed, resulting in improved chances of achieving influence, outcomes and impacts; rigorous documentation on the achievements of FTA, allowing learning to take place.

Flagship 1 will focus on extending option design across a broader range of countries, and developing planned comparisons to evaluate the effectiveness of key management, market and policy interventions across contexts, through embedding research in development. This involves major change in our relationship with development partners and is tightly coupled with capacity development. Gender is explicit in both options (designed for transformative outcomes) and context (how gender relationships condition suitability). Due to restricted funding we continue domestication of priority species into 2016 and postpone initiation of diversity breeding to the second phase. Priorities are options for food security in sub-Saharan Africa together with NTFP markets in South-East Asia; smallholder timber in Latin America, as well as, sustainable productivity of tree-crop commodities and management of soil health, globally. **Flagship 2** main focus continues being towards improved management and conservation and it promotion through new knowledge, tools and approaches to sustainable management of forest and tree resources (including bushmeat, forest foods and timber) in Africa and Latin America. Publications will document the potential of community forestry for conservation and development in Latin America, and the impact of logging on commercial trees in Central Africa and the recovery of forest productivity. Research will explore options for increasing the participation of women in forest management in India and enhancing the benefits from certification. Analyses of the genetic diversity of priority tree species and their traits will be combined with threat analyses, conservation guidelines and promotion of the use of diversity for environmental and socioeconomic benefits, including indigenous nut and fruit trees in farm and forest landscapes in Central Asia and restoration of degraded lands in South America. Teaching tools, training and policy recommendations will promote uptake of improved management. **Flagship 3** will focus on completing the commitments in the extension phase and documenting the outcomes, within the reduced budgetary reality. The evidence from sentinel landscape changes in tree and forest cover

will be linked to drivers and new "theory of place". We also focus efforts on the LUMENS integrative frame for land use with multiple environmental services in SDG context, and linkages to the ecosystem services partnership. Case studies that add depth of local understanding to the overall statistical evidence for the relevance of forest and tree cover, through nutritional diversity, to human nutrition benefits will be brought to their conclusions. Efforts to synthesize existing evidence in high-level policy for a will continue.   Experience with the networks of learning landscapes will be synthesized in a book on PES, marking the shift in paradigms and the rich learnings in practice. We will capitalize on the data sets of the **Sentinel Landscapes** as well as the partnership platforms development through a series of interactive, regional workshops with key partners to apply the analytical tools developed to the data and generate policy relevant evidence on the role of trees to rural peoples livelihood, both in terms of resilience as well as food security. Following up on the 2015 Paris Climate Agreement, **Flagship 4** is stepping up efforts to provide knowledge, tools, and policy advice towards the formulation of national and international land-based emissions reduction policy and action. We work towards efficient, effective, and equitable reduction of GHG emissions from the AFOLU sector (REDD+ objective) and the adaptation of people and forests to climate change (NAMAS, National Adaptation Plans); addressing gender issues in mitigation and adaptation. We are broadening the approach to incorporate multiple landscape functions in land-planning (LUMENS) and improve 'co-benefits' (e.g. livelihoods, food production, water; biodiversity). We will model and explore different LEDS futures, increasingly addressing the role of the private sector, and the role of biofuels in sustainable development. This work supports partners in 29 countries towards raising national ambitions through improved multi-level, multi-sectoral resource governance, verification through independent forest and carbon accounting and the synergies and trade-offs between mitigation, adaptation and development policies. **Flagship 5** contributes to reducing the negative social and environmental impacts of investments associated with expanding national and international demand for food, feed, fiber and energy, and support opportunities for more sustainable and inclusive commodity supply. In 2016, we will focus on assessing corporate decision-making strategies for the adoption of sustainability practices and analyze the social and environmental outcomes across different business models with the main aim of informing private policies to enhance the social and environmental performance of investments, thus reducing pressures on forests and improving social inclusion; analyzing public-private governance arrangements in support of sustainable commodity supply, and the institutional conditions under which more state regulations and market-based arrangements can achieve better outcomes for forests through improved legal, sustainable and equitable production; and identifying innovative mechanisms for resolving conflicting claims, assessing institutional arrangements, collective action and coordination for tenure security, and strengthening women's rights to resources access.

For the cross-cutting teams, **Gender** will continue support ongoing gender strategic research projects that have been steadily increasing in the last three years to ensure successful finalization and streamlining gender in all relevant projects. In FP1, we will focus on concluding work on gender and migration, examining implications for forest governance and agroforest smallholder communities. In FP2 we will focus on consolidating results to inform key bilateral projects and flagship outputs. The multi-country study on gender perspectives on roles and land use preferences in FP3 will be finalized. We will continue our support the process of gender integration in REDD+ schemes in FP4 and building collaborations with CCAFS. Similar support will be provided to FP5 as it works to wrap up research on gender implications of cash crop expansion and value chain analysis. Planned activities include a knowledge to action workshop to bring together gender

theory and gender research practice, production of a guide on intersectional analysis for scientists, and strengthening the gender communities of practice in the CRP, including partners. **Capacity Development** focuses on the harmonization of capacity development practices, systems and data, and establishes ICT based systems/platforms for sharing learning resources. We will carry out capacity related organizational analysis of FTA as a program. We will continue collaboration with and support to the Gender Integration Team on capacity development methods. In **Communication** our web-centric approach combining contemporary social media tools with traditional outreach channels will continue with a strong focus on M&E, to constantly improve our program, collect usage data on research outputs, and contribute to adoption. We are also stepping up direct, targeted country-level knowledge sharing more strongly.

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Table 1 - Planned key activities for 2016 to produce IDOs and outputs, with associated planned budgets

Level of organisation within the CRP	Description of planned key activities at each level of internal organisation	Expected results of planned key activities	Planned budget ($ 000s)
Flagship 1: **Enhancing how trees and forests contribute to smallholder livelihoods**	**Key activities:** 1. Enhancing sustainable productivity, food security and nutrition in smallholder livelihood systems through better management of tree and forest resources. 2. Increasing smallholder income from tree and forest products through better market function and extension. 3. Increasing equity and access for smallholders to benefits from trees and forests. 4. Improving the efficiency and effectiveness of how the flagship delivers benefits to smallholders through impact analyses. **Country focus for 2016**: Indonesia, Peru, Kenya, Ethiopia, Mali, Niger, Vietnam, Rwanda, Cote d'Ivoire, Burundi, Uganda, Malawi **Gender research dimension**: Focuses on gender transformative outcomes where women are more involved in decision making about management of tree resources, and together with	**Outcomes:** Baseline tree intensification option x context matrices co-developed with public / private consortia (communities of practice) in large scaling domains in at least six countries. Public / private consortia in six countries are informed by FTA knowledge on alternatives for value chain development, extension provision and seed and seedling supply for large scaling domains. Communities of practice in four countries use FTA knowledge in recognizing policy/institutional reform to lift barriers to sustainable and equitable tree management in large scaling domains.	Total: 16.547 W1/2: 2.300 Bilateral:14.247 [1]Gender: 12% Cap. Dev: 9%

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[1] Note that the Gender and Capacity Development percentage do not add. Approximately 30% of the activities to be carried out in capacity development are gender relevant or targeted to women participants.

	FP5 and PIM on interactions with land and tree tenure, particularly related to tree crop rejuvenation, migration and land-use decisions		
Flagship 2: **Forest management and conservation of biodiversity resources**	**Key activities:** 1. Diversified Forest Management. Evaluating and documenting the potential benefits of managing forests and woodlands for multiple services, resources (including food) and beneficiaries (both men and women) and developing and promoting approaches to diversified and sustainable management. 2. Conservation and use of Tree Genetic Resources: Evaluating the intraspecific diversity of priority tree species and how it can be used and managed to increase production, resilience and value. Analyzing the conservation status of priority trees and their intraspecific diversity and evaluating and promoting options for addressing threats to their continuing availability, through conservation, management and better use of tree genetic diversity. 3. Forest Restoration: Developing approaches to sustainably restoring degraded land with tree-based ecosystems that can adapt to global change, for production and ecosystem services, to help countries meet the Bonn Challenge/Aichi Targets. **Country focus for 2016:** Benin, Bolivia, Botswana, Brazil, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, China, Colombia, Congo (Brazzaville) Congo (Democratic Republic), Costa Rica, Côte d'Ivoire, Ecuador, El Salvador, Equatorial Guinea, Gabon, Ghana, Guatemala, Honduras, India, Indonesia, Kenya, Kyrgyzstan, Madagascar,	**Outcomes:** Model forest farms in three countries demonstrate sustainable management of fruit tree resources At least three timber-producing countries have adopted DNA-based verification methods for ensuring legality of traded timber Four universities in developing countries adopt tree training modules developed by FTA National Partners in Burkina Faso understand the threats to priority tree species and plan mitigation actions Restoration of tree-based ecosystems to comply with AICHI target 15 enhanced through adoption by key actors of guidelines for selection of well adapted planting material Tree seed centers and development NGOs in Africa and Nepal adopt the interactive map tool produced by FTA National governments in three Amazonian countries adopt recommendations and promote policies to legalize hunting and bushmeat trade.	Total: 6.876 W1/2: 2.300 Bilateral:4.576 [2]Gender: 12% Cap. Dev: 9%

	Malawi, Malaysia, Mozambique, Nepal, Nicaragua, Nigeria, Peru, Philippines, Rwanda, South Africa, Tajikistan **Gender research dimension:** Gender-specific research in Flagship 2 focuses on constraints and opportunities for promoting the active and equal participation of women and marginalized groups in forest management processes as well as on gender norms that influence the uptake of innovations in tree genetic resource management. All FP research is gender-responsive, with project teams receiving targeted support for gender integration from a Gender Specialist. Examples include research on understanding tenure patterns for priority tree species Vitellaria paradoxa and Parkia biglobosa that examines differentiated access to these species for women and men across ethnic groups, and detailed gender analyses in components of work on the political-economic factors affecting community forest management in Central America.		
Flagship 3: **Landscape management for achieving sustainable development goals (incl. Sentinel Landscapes)**	**Key activities:** 1. Understanding patterns and drivers of forest (tree cover) transition in decline and restoration phases 2. Understanding consequences of tree cover transition for livelihoods, environmental goods and services & adaptive policy 3. Actively learning landscapes where innovative response and policy options are being tested 4. Integration into relevant policies of the contribution FT&A make at landscape level to food security across forest transition stages	**Outcomes:** As agreed in the FTA interim proposal, our outcomes for 2016 are: At least five countries use FTA evidence in designing gender equitable fund- and market based financing mechanisms (including REDD+) for integrated rewards for ecosystem services with appropriate levels of conditionality. This will require further synthesis of the learning landscape networks, the synthesis in the forthcoming PES book and active roles in the ES	Total: 10.453 W1/2: 2.300 Bilateral:8.153 [3]Gender: 12% Cap. Dev: 9%

[3] Note that the Gender and Capacity Development percentage do not add. Approximately 30% of the activities to be carried out in capacity development are gender relevant or targeted to women participants.

Country focus for 2016:

Sentinel Landscape countries: Nicaragua, Honduras, Peru, Bolivia, Burkina Faso, Ghana, Cameroon, Uganda, Kenya, Zambia, India, China, Laos, Indonesia

ASB countries: Peru, Brazil, Cameroon, DRC, Indonesia, Viet Nam, Philippines

Learning landscape countries: *RUPES/PRESA*: Indonesia, Philippines, Viet Nam, Nepal, India, Kenya, Uganda, Tanzania. *Agrarian change*: Indonesia, Nicaragua, Cameroon, Zambia, Ethiopia and Burkina Faso. *Food security and nutrition*: Burkina Faso, Ethiopia, Uganda, Cameroon and Zambia. *Model forest network*: Guatemala, El Salvador, Costa Rica, Colombia, Dominican Republic, Bolivia

Gender research dimension:

As was confirmed by our 2015 work, the appreciation of environmental services, as affected by changes in quantitative and qualitative aspects of tree cover, is gender specific, within many local contexts. Comparative research of how space in a village-forest gradient is used and appreciated by women and men is the basis for further exploration of gender-differentiated ES perceptions and prioritization in land use decisions. A combination of focus group discussions, household surveys, simulation (role-play) games of land use change scenarios, and agent-based modeling has proven to be productive in triangulating the partially conflicting signals in earlier data from the learning landscape contexts; publication of this work is in progress as is the analysis of gender specific approaches for enhancing knowledge and understanding of multifunctional landscapes, land – use decision and environmental services. Development and assessment of gender informed

Partnership (FTA is directly involved in the Africa and Asia chapter meetings in 2016). Further coordination with FTA.4 needed on documenting change regarding REDD+.

At least ten countries and key sub-national entities use FTA evidence to develop quantitative targets for tenure reform as contribution to conflict resolution, food security and integrated sustainable development goal achievement, with attention to gender-specific tenure aspects.

Progress on the outcome side appears to be slower than expected (hoped for), but our case studies and analytical work are aimed, in cooperation with partners, to keep the issue on the front-burner, and bring these perspectives more strongly into the "restoration" debates, with large commitments under the Bonn challenge, but little clarity on tenurial reform needed to achieve them.

* inc. 750K$ for Sent. Landscapes

	tools and approaches for decision-making on land use and ecosystem services is in a test phase.		
Flagship 4: **Climate change adaptation and mitigation using FT&A**	**Key activities:** 1. Harnessing forest, trees and agroforestry for climate change mitigation 2. Enhancing climate change adaptation through forests, trees and agroforestry 3. Understanding the role of forests, trees and agroforestry in achieving synergies between climate change mitigation and adaptation **Country focus for 2016:** Burkina Faso, Brazil, Cambodia, Cameroon, China, Colombia, Costa Rica, Ethiopia, Gabon, Ghana, Honduras, India, Indonesia, Kenya, Laos, Mexico, Micronesia, Mozambique, Nepal, Papua New Guinea, Peru, Philippines, Sierra Leone, Senegal, Tanzania, Vietnam **Gender research dimension:** Women get empowered because they understand how to use the field monitoring system equipment which is central to the financial security of the enterprise and integral to its management. In related project activities, have a balanced gender-members or participation, e.g. seminar to share REDD+ and social/community forestry research results, choice of Community Forestry Enterprises (CFE) and implementing organizations.	**Outcomes:** National and international actions under the new Paris Climate Agreement, including increased ambition, performance, accounting and MRV, accounting rules, compliance and finance are informed by FTA-generated knowledge Five first and second generation REDD+ countries are guided by FTA information, analysis, tools, and best practices when formulating and implementing more 3E+ REDD+ national strategies, policies, measures and performance and impact assessments in the context of their national INDCS National and subnational conservation and forest sector actors promote efficient incentive schemes for conservation on native community land Contributions to UNFCCC Agriculture Road Map and coordination and cohesion of adaptation finance and forests (SCF / GCF) National/ sub national agricultural public/private sector actors promote more CC resilient systems and practices for at least one commodity crop, and better adaptation policies and practices in forests Agencies with a mitigation and adaptation mandate in five countries understand shortcomings of segregated approaches and are actively implementing best practices and more synergistic climate mitigation policies (REDD+) and NAPs	Total: 14.473 W1/2: 2.300 Bilateral:12.173 [4]Gender: 12% Cap. Dev: 9%

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[4] Note that the Gender and Capacity Development percentage do not add. Approximately 30% of the activities to be carried out in capacity development are gender relevant or targeted to women participants.

| | | International (UNFCCC: GCF, SBSTA) policy, methodologies and guidance on synergies and tradeoffs between mitigation and adaptation informed by FTA

Land and climate-related policymakers use our findings on synergies between carbon and adaptation services | |
|---|---|---|---|
| **Flagship 5 :**

Global Governance, Trade and Investment | **Key activities:**

1. Analyse socio-environmental outcomes from disparate business models in select commodities

2. Engage select business platforms on options to overcome challenges of 'zero deforestation'

3. Inform multi-stakeholder processes on options to support wider adoption of sustainability practices that also promote social inclusion

4. Lessons for enhancing legality in timber markets with reduced impacts on smallholders

5. Analyse public-private arrangements for supporting sustainable commodity supply

6. Select investors acknowledge options of commercially viable business models that deliver improved outcomes for environmental sustainability and social inclusion

7. Analysis of factors influencing tenure security

8. Support sharing of experiences across policy makers on factors shaping tenure reforms

Country focus for 2016: | **Outcomes:**

Select investors in three countries (likely including Brazil, Indonesia, Mozambique) consider FTA knowledge in the process of developing more inclusive and sustainable business models, with focus on globally trade commodities (timber, oil palm, beef, sugarcane, cocoa)

Multi-stakeholder processes in two countries informed by FTA knowledge on institutional arrangements for enhancing responsible investments in support to low carbon development

FTA informed at least two processes for improving the articulation of international sustainability standards (e.g. RSPO, FSC) into national sustainability standards (e.g. ISPO, SVLK)

Government agencies in three countries equipped with FTA-informed policy options for enhancing accountability, legal compliance and performance of investments

Policymakers and practitioners use FTA knowledge to help identify, prioritize and integrate concrete action points into the planning processes for strengthening tenure reform implementation in three countries (likely Indonesia, Peru and Uganda) | Total: 5.645

W1/2: 2.300

Bilateral:3.345

[5]Gender: 12%

Cap. Dev: 9% |

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[5] Note that the Gender and Capacity Development percentage do not add. Approximately 30% of the activities to be carried out in capacity development are gender relevant or targeted to women participants.

	Brazil, Cameroon, Colombia, Congo, DR Congo, Gabon, Guatemala, Indonesia, Kenya, Mozambique, Nicaragua, Peru, Tanzania, Uganda		
	Gender research dimension:		
	Understand the factors that affect women and men in the process of agribusiness expansion related to large-scale investments in global agricultural commodities (e.g. oil palm, soy, beef) and timber in forest landscapes; assess whether and how these gendered outcomes vary by business models, and social and institutional contexts; disseminate research findings to inform gender inclusive policies and practices.		
FP 6: **Management support unit and cross-cutting themes** (Gender, Communication, MEIA, Capacity Development)	**Gender**: Support the program in achieving salient, legitimate, credible science that observes the different interests, needs and experiences of women and men and that would support transformative change towards gender equality and social inclusion. **MEIA:** implementation MEIA strategy, guidelines and tools; various MEIA studies. **CapDev**: Support and facilitate effective Capacity Development of FTA participant institutions and outside stakeholders through practice and data harmonization and non-practice oriented knowledge		Total: W1/2: 3,000 W3/Bilateral:

Level n-2: Cluster of activities For each Flagship Project, list the relevant Clusters of activities; use one row for each activity Cluster. Number each Cluster with two digits: that of the Flagship Project to which the activity cluster 'belongs' and that of the Cluster itself within the Flagship (e.g., 1.1 for Cluster 1 in Flagship 1)	For each Cluster of activities, indicate: - objectives pursued - geographical location(s) of the work - type of methods used (e.g., diagnosis survey, on-farm trial, ...) - Gender research dimension (if relevant). If there is a gender dimension, its expected results must be translated in the outputs and research outcomes in next column	Expected outputs (results of discovery and proof of concept phases of R&D, see Annex 1) and research outcomes (results of pilot phase of R&D, see Annex 1)	Budget per Cluster of activities
1. 1. Enhancing sustainable productivity, food security and nutrition in smallholder livelihood systems through better management of tree and forest resources	**Objectives pursued:** Methods, approaches and databases for domestication and improvement of at least three priority tree species. Development of tree management options for soil health and functional diversity for large scaling domains in at least four countries and for oil palm intercropping in Brazil and smallholder timber in Indonesia and Peru. Design of planned comparisons to evaluate tree intensification options in relation to context for large scaling domains **Geographical locations of the work:** East and Southern Africa, Latin America, SE Asia, West Africa. **Types of methods used**: Mixed methods are integrated using the 'research in development' paradigm outlined in Coe et al 2014 http://www.sciencedirect.com/science/article/pii/S1877343513001437	**Expected outputs :** • Three journal articles and a propagation manual on key tree species including *Allanblackia stuhlmannii, Docynia indica* and a range of species involved in systems domestication in Indonesia. • Six journal articles on options for tree management to improve food security in East and Southern Africa, buffer zone management around the Virunga national park in DRC, sloping land in Vietnam, cocoa agroforestry in Peru and land restoration / oil palm intercropping in Brazil. • One journal article, five reports and a tool documenting planned comparisons for evaluating agroforestry options in relation to context in East, West and Central Africa. **Progress towards Outcomes in 2016:**	Total: 6,227 W1/2: 767 Gender: 747

	Essentially this involves characterisation using remote sensing and GIS coupled with household survey; large N, randomly controlled field trials with crowd sourcing and direct measurement of performance; participatory action research within the context of nested scale innovation platforms; system modelling at field and farm scales coupled with scenario development and analysis; laboratory and field trials of impacts of trees on soil health, functional profiling of soil biota using genomic tools, tree propagation and g x e interactions **Gender research dimension (if relevant):** Gender is explicitly considered in relation to both options (designed for transformative outcomes) and context (how present gender relationships condition suitability of options).	Planned comparisons to evaluate intensification options in relation to context co-developed with public / private consortia (communities of practice) in large scaling domains in at least six countries (likely Peru, Kenya, Ethiopia, Mali, Niger, Vietnam).	
1.2. Increasing smallholder income from tree and forest products through better market function and extension	**Objectives pursued**: Analysis of market function and ways to improve it for at least two key tree or forest products and for large scaling domains in at least two countries (collaboration with FTA.5 and PIM). Priorities for planned comparison of alternative extension approaches for tree intensification options for large scaling domains. Priorities for planned comparison of alternative seed and seedling supply options for large scaling domains in at least six countries **Geographical locations of the work:** East Africa, Latin America, SE Asia, West Africa. **Types of methods used:** Value chain analysis; market opportunity assessments; value chain mapping; five capital approach to assessing impact of value chain interventions on poverty; gender approaches to value chain analyses; RCTs; farmer surveys; focus group discussions; participatory	**Expected outputs :** • Two journal articles and four reports on market development for tree products and large scaling domains including agroforestry in Sulawesi, Eastern DRC and Vietnam, community forestry in Latin America and smallholder farmers in East and Southern Africa. • Two reports on planned comparisons of extension approaches in East and Southern Africa • Two tools, three reports and an information brief on nursery establishment in West Africa, seed and seedling supply systems in East Africa, overcoming bottlenecks in supply of *Allanblackia* and international cocoa standards. **Progress towards Outcomes in 2016:** Public / private consortia in six countries (likely Indonesia, Kenya, Ethiopia, Mali, Rwanda, Peru)	Total: 5,774 W1/2: 767 Gender:693

| | | producer organization workshops; key informant interviews

Gender research dimension (if relevant): Impacts of gender division of labour on benefit flows; how gender affects access to markets and different forms of extension provision.	are informed by FTA knowledge on alternatives for market development, extension provision and seed and seedling supply for large scaling domains.	
1.3 Increasing equity and access for smallholders to benefits from trees and forests	**Objectives pursued:** Review of barriers to smallholders accessing benefits from trees as a result of forest legislation and land tenure in relation to gender in at least four countries in collaboration with FP5 and PIM.

Identification of knowledge requirements for tree intensification in large scaling domains in at least four countries.

Proof of concept for toolkit for visualizing impacts of field and farm level land use decisions on multiple ecosystem services at local landscape scales (with FTA.3).

Geographical locations of the work: East and West Africa, Latin America, SE Asia.

Types of methods used: Policy analysis and dialogue

Gender research dimension (if relevant): The analysis of barriers to smallholders accessing benefits from trees as a result of forest legislation and land tenure is specifically in relation to gender; local knowledge is acquired and interpreted with explicit reference to gender | **Expected outputs :**

• Eight journal articles and three policy briefs targeting change in regulatory frameworks affecting forest that constrain benefit flows to smallholders including options for commodity crop cultivation and timber production globally and strengthening women's participation in forest management in Uganda.

• Report on knowledge requirements for tree intensification and practitioner guide on facilitating tenure security.

• Tool and report on tools for visualizing synergies and trade-offs amongst impacts of land use change at field and farm level on ecosystem service provision.

Progress towards Outcomes in 2016:

Communities of practice in four countries (likely Peru, Kenya, Rwanda,Vietnam) use FTA knowledge in recognizing policy/institutional reform to lift barriers to sustainable and equitable tree management in large scaling domains. | Total: 3,606

W1/2: 767

Gender: 525 |

1.4 Improving the efficiency and effectiveness of how the flagship delivers benefits to smallholders through impact analyses	**Objectives pursued:** Impact assessment of key past projects and establishment of baselines for new projects **Geographical locations of the work**: Sub-Saharan Africa **Types of methods used:** Baseline characterisation, randomised control trials, farmer survey, direct yield measurement, cost benefit analysis, participatory monitoring and impact assessment. **Gender research dimension (if relevant):** gender is explicitly considered in data collection and analysis	**Expected outputs :** **Progress towards Outcomes in 2016:** **Reports of impact assessment on agroforestry in SE Asia, cocoa in West Africa and improved forest policy globally.** Understanding causes of variability in impact provides critical information on the contextual factors that determine it and need to be incorporated in development and evaluation of options.	Total: 174 W1/2: 0 Gender:21
2.1 Diversified forest management	**Objectives pursued**: In priority sites forest and woodland managers implement improved practices that sustain multiple products and services of which the benefits are equitably shared **Geographical locations of the work**: Benin, Brazil, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, China, Colombia, Congo (Brazzaville) Congo (Democratic Republic) Costa Rica, El Salvador, Equatorial Guinea, Gabon, Ghana, Guatemala, Honduras, India, Indonesia, Kyrgyzstan, Malawi, Malaysia, Mozambique, Nepal, Nicaragua, Peru, Philippines, Rwanda. **Types of methods used:** Collection of data; surveys and interviews of users and managers of resources; participatory research disaggregated by gender; sampling and measurements of trees; literature reviews; genetic analyses of trees; development of databases and tools; collaborative development and testing of guidelines; policy evaluations; baseline studies; training courses, fellowships; long term research plots. **Gender research dimension:** In DFM strategic gender research focuses on approaches for	**Expected outputs:** • Evaluation of the growth, population dynamics and genetic diversity of CITES-listed timber species in community-managed forests in Central America • Study and diagnosis of policy environment as affecting community forest management in in contrasting legal and socio-economic contexts • Reports on local ecological knowledge and marketing of locally valued NTFP species • Assessment of the floristic composition and biodiversity of Central African Forests • Metadatabase to predict timber volume of Amazonian managed forests • Studies of the use of trees by local people; the impact of their use on tree populations; options for sustainable harvesting of forest resources • Data set on mahogany growth and survival and natural regeneration of multiple commercial timber species in response to	Total: 1,953 W1/2: 767 Gender:234

	promoting the active participation of women and tribal groups in joint forest management in Madhya Pradesh and Karnataka, India. Gender-responsive research ranges from an analysis of gendered NTFP collection patterns in forest concessions in Cameroon, to examining gendered local ecological knowledge of fruit trees in India, to a gender-responsive analysis of political-economic factors shaping community forestry management in Central America.	silvicultural treatments from remeasurements at 20 years of experimental sites in Mesoamerica

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- silvicultural treatments from remeasurements at 20 years of experimental sites in Mesoamerica

- Data on the reproductive biology of the species

- Handbook on bushmeat for CITES

- Policy briefs and synthesis of game populations, hunting practices, consumption and trade of bushmeat in the Ecuadorian Amazon Napo

- Participatory monitoring systems (PMS) for monitoring hunting, consumption and trade of bushmeat and other wildlife products

- Training on Methods and theories of sustainable science and landscape ecology in bushmeat studies for undergraduate and graduate students from the economic, anthropological, environmental and biological departments

- Training on Participatory field methods for assessing management, use and conservation of biodiversity in fallows and secondary forests for technicians and biologists working at the Environmental Ministry stations in Amazonia, Ecuador

Progress towards Outcomes in 2016:

Publications will make available new knowledge about: the effect of logging on the genetic diversity of commercially important timber species in Africa and Mesoamerica; how genetic markers can be used to prioritize conservation actions for priority timber species; the recovery of productivity of forests after logging in tropical regions around the world; the impact of logging and industrial forestry on access to forest resources by villagers in the

		Congo Basin; the benefits from community forestry for people and biodiversity conservation in Mesoamerica. Multiple articles and policy recommendations will address the importance of bushmeat and options for managing hunting more sustainably in Africa and South America and for increasing the participation of women in forest management decision making in India. Insights into the potential of management incentives such as certification and participatory management will be made available. Training of professional students, technicians and employees of government agencies will enhance uptake of this new knowledge into management and policy. In Kyrgyzstan and Uzbekistan, forest enterprise directors and other relevant officials will receive guidelines for sustainable forest management and will be making necessary changes in management practices.	
2.2 Conservation and use of tree genetic resources	**Objectives pursued:** International and national conservation actors (conservation organizations, government agencies, forest managers) are effectively implementing and coordinating actions to conserve the genetic resources of priority species fundamental to rural livelihoods and/ or environmental services **Geographical locations of the work:** Benin, Botswana, Burkina Faso, Cameroon, Côte d'Ivoire, Equatorial Guinea, Gabon, Ghana, India, Kenya, Kyrgyzstan, Madagascar, Malawi, Mozambique, Nigeria, Peru, South Africa, Tajikistan **Types of methods used:** Threat analysis tools; spatial analyses; genetic analyses; phenotypic characterization; databases; syntheses of data; literature reviews; modelling tools; synthesizing data and making it available in a simple form;	**Expected outputs :** • Genetic diversity gap filling in ex situ collections and collecting for the Coconut International Collections • Enhancing www.vegetationmap4africa.org species selection tools and related Android smart-phone applications by including information on local names and other information available from the ICRAF-RELMA useful tree species series • Atlas of current distribution of 54 key agroforestry species in Central America including expected changes in distribution under climate change	Total: 3,146 W1/2: 767 Gender:377

collaborative development of guidelines; collaborative development of standards; collaborative development of strategy; publication of articles and editing of special issues of journals; training courses; fellowships; mentoring; presentation of action plan/strategy to country representatives, gender-responsive participatory methods

Gender research dimension: Strategic gender research focuses on gender norms influencing the uptake of innovations in fruit tree management in home gardens and on forest lands in Kyrgyzstan. Gender-responsive research ranges from gendered analyses of tree tenure for two priority tree species in Burkina Faso to gender-responsive conservation strategies developed for Khaya species in West Africa, and gender-sensitive analyses of practices for in situ and on farm conservation of tropical fruit tree diversity four Asian countries.

- Map of the genetic diversity of Parkia biglobosa characterized across its range

- Modelling food tree species distribution in Burkina Faso

- Analysis of different traits in ethnovarieties of Vitellaria paradoxa

- Conservation strategies for Khaya species in West Africa

- Publication of global coconut GR strategy

- Catalogue of useful forms of walnut in Central Asia

- Report with datasets and gap analysis describing needs in collections for the assembly of training populations for the African Orphan Crops Consortium, focused on agroforestry tree species among the 100 priority species for AOCC

Progress towards Outcomes in 2016:

Three countries are already using DNA-based verification methods at least in some cases of dispute over origin or species of timber.

Four universities in developing countries provide training on conservation and better se of FGR The Universidad del Valle in Guatemala and Universidad Austral, Valdivia, CHILE use our training materials in courses that include forest genetic resources. Among other universities teaching forest genetic resources and conservation, is the Colegio de Postgraduados in Mexico. In

| | | addition a regional forest genetic resources training centre is being established in China.

A participatory expert feedback system has been designed and used in Burkina Faso to obtain consensus information about threats to the resources. The results will be shared with key stakeholders in 2016.

A new and improved version of the tree species selection and tree species distribution tools available through the vegetationmap4africa (www.vegetationmap4africa.org) has been launched. Smart phone versions (http://vegetationmap4africa.org/Vegetation_map/Mobile_maps.html ; https://play.google.com/store/apps/details?id=org.icraf.gsl.iucn.treespecieslocator&hl=en) were developed from the vegetationmap4africa that show suitable tree species at the location of the user, which were tested in the Mount Elgon region of Uganda in the context of forest landscape restoration. | |
|---|---|---|---|
| 2.3 Forest restoration | **Objectives pursued:** Public and private entities and civil society carry out restoration of productive, self-sustaining forest ecosystems that equitably benefit local people (men, women and marginalized groups)

Geographical locations of the work: Bolivia, Brazil, Burkina Faso, Cameroon, Colombia, Congo (Brazzaville), Costa Rica, Ecuador, El Salvador, Gabon, Guatemala, Honduras, Nicaragua, Peru, Philippines, Congo (Democratic Republic)

Types of methods used: Literature review; seed collection and planting trials; syntheses of | **Expected outputs :**

- Publications on the distribution of genetic diversity in priority tree species

- Model decision tree tool for selecting the best seed sources for restoration sites of dry forest in Colombia

- Policy recommendations to amend regional and national legislation on restoration in Colombia/Latin America | Total:1,778

W1/2: 767

Gender:213 |

	knowledge; surveys and interviews, field evaluations; presentation of ideas in conferences; gender-responsive participatory methods	• State of the art review on Andean forest restoration in Bolivia, Colombia, Ecuador and Peru • Seed and seedling sources in forest and landscape restoration - results of a global survey **Progress towards Outcomes in 2016:** Protocols on restoration of tropical dry forest will be disseminated through virtual network of experts in tropical dry forest in Colombia Gap analyses on seed production and supply systems will be conducted in the context of forest landscape restoration, in a set of countries associated to the 20x20 initiative Online decision support tool to help restoration practitioners with the selection of most appropriate species combinations and seed sources for restoration of tropical dry forest vegetation in Colombia will be developed Restoration pilot plots in the compensatory areas of the largest Hydroelectric power plant of Ituango in Colombia will be established and monitored.	
3.1 Understanding patterns and drivers of forest (tree cover) transition in decline and restoration phases	**Objectives pursued:** completion of baseline data collection in 9 Sentinel Landscapes is expected, along with further synthesis of global, regional and local analysis of tree cover change in the light of forest transition hypotheses at the level of patterns, drivers, consequences (ecosystem services, SDG's) and leverage **Geographical locations of the work:** Sentinel Landscape countries: Nicaragua, Honduras, Peru,	**Expected outputs:** • Synthesis and case study papers based on empirical data sets of quantitative and qualitative tree cover transitions across major eco climatic zones**;** Synthesis and case study papers based on empirical data on changes in spatial pattern of tree cover within landscapes in relation to segregation/ integration of functions	Total: 4,683 W1/2: 575 Gender: 562

Bolivia, Burkina Faso, Ghana, Cameroon, Uganda, Kenya, Zambia, India, China, Laos, Indonesia

ASB countries: Peru, Brazil, Cameroon, DRC, Indonesia, Viet Nam, Philippines

Types of methods used: Groundtruthing and remote sensing analysis of land cover change, linked to Land Cover ⇔ Land Use typology, characterization across life cycle of land use systems, driver analysis in statistical data at (sub)national scale, land use change quantification across forest policy domains, allometrics to translate land cover change to emission estimates

Gender research dimension (if relevant): Gender-based local knowledge is used in 'ground truthing', the legends of land use maps include categories useful to both men and women

- Functional typology of landscape configurations extended to Africa from current SE Asia application

- Methods for monitoring and quantifying institutional capacity at the landscape level developed and shared.

- Synthesis and case study papers based on policy levers and negotiation opportunities to influence drivers of tree cover transitions, rehabilitation and/or agroforestry transformation

- Landscape level indicators to monitor and evaluate livelihoods, environmental goods and services & institutional capacity collected across sentinel landscapes

Progress towards Outcomes in 2016:

As reported in 2015, the work on LUWES/LUMENS is shared across the ASB countries as spatial frame for managing tradeoffs:

In Indonesia progress on the use in the provincial spatial planning process in 6 provinces is helping to further refine the LUMENS (Land Use for Multiple Environmental Services) frame and its stepwise procedure into account in policy formulation, finding new ways to make use of spatial information. This is also used to develop sustainable nested system of MRV (Monitoring Reporting and Evaluation) and REL (Reference Emission Levels) from sub-national to national level.

In Nicaragua as first among the Sentinel Landscape countries, our analysis of socio-economical and biophysical factors driving tree cover change and its consequences starts to inform local policy processes.

		Analysis of drivers of agrarian change starts to inform policy processes in Nicaragua, Burkina Faso, Zambia, Cameroon, Ethiopia, Indonesia, as further step towards the intended outcome.	
3.2. Understanding consequences of tree cover transition for livelihoods, environmental goods and services & adaptive policy	**Objectives pursued: w**e will continue with the analysis of case studies and global syntheses on how tree cover change (documented in 3.1) influences various ecosystem services, and how rule- and incentive-based ways to influence land use decisions can be used to enhance ecosystem service levels. **Geographical locations of the work:** Sentinel Landscape countries: Nicaragua, Honduras, Peru, Burkina Faso, Ghana, Cameroon, Uganda, Kenya, Zambia, India, China, Laos, Indonesia ASB countries: Peru, Brazil, Cameroon, DRC, Indonesia, Viet Nam, Philippines RUPES/PRESA learning landscapes: Indonesia, Philippines, Viet Nam, Nepal, India, Kenya, Uganda, Tanzania Agrarian change landscapes: Indonesia, Nicaragua, Cameroon, Zambia, Ethiopia and Burkina Faso Food security and nutrition landscapes: Burkina Faso, Ethiopia, Uganda, Cameroon and Zambia **Types of methods used:** Research makes use of multiple networks of case studies, zooming in on contrasts and comparisons that can test propositions and hypotheses at the level of ecosystem services and landscape-level management and governance, including the use of land use planning, tenurial reform and changes in economic incentives. Tool-books with participatory assessment methods are available, and are being updated as part of the research.	**Expected outputs**: • Tools for and case studies of quantifying buffering of water flows and other hydrological ES linked to tree cover (quantity, quality, pattern) and agriculture • Tools for and case studies of understanding biodiversity-based environmental services across stages of tree cover transition, incl. pollination, dispersal • Tools for and case studies of quantifying institutional capacity of managing natural resource base at the landscape scale • Tools for and case studies of quantifying land health effects of changes in vegetation structure across stages of tree cover transition, incl. soil fertility, erosion • Not just carbon? Quantified tradeoffs between C stocks and other environmental services across tree cover transitions • Gender, age and wealth-specific appreciation of tree cover transitions in relation to demographic transitions and development context • Tested tools and governance mechanisms for adaptive landscape management of ecology-economics trade-offs including performance-based incentive systems • Policies for the agriculture-forestry interface and strategies for sustaining food security,	Total: 2,388 W1/2: 575 Gender: 287

Analytical methods include econometrical analysis, process-based stock-and-flow models, agent-based models of actor decision making.

Gender research dimension (if relevant): Gender specificity of appreciation of ecosystem services receives specific attention in studies of water flow and biodiversity. Gender specific appreciation of the trade-offs between provisioning and other ecosystem services is studies by a combination of methods (focus group discussions, role-play games, household surveys and agent-based modelling). Gender receives due attention in analysis of local institutional setups for ES enhancement, including solutions for tenure-related conflicts. Demography and gender-specific shifts in market integration & migration receive attention in a number of the case studies. Development and testing of gender informed tools and approaches for decision-making on land use and ecosystem services (this includes gender specific appreciation of water, biodiversity, markets and institutions).

ecological functionality and rural development in multi-use landscape mosaics

Progress towards Outcomes in 2016:

An Asia and an Africa specific meeting of the Ecosystem Services Partnership will offer opportunities to discuss progress made in a regional context. A more functional interpretation of changes in tree cover for ecosystem services is emerging from comparative studies.

In Eastern and Southern Africa the further analysis of Landcare organizations for collective action at landscape scales are supported in gendered analysis of group performance. From this analysis further change in the organizations can be expected as outcome. Similarly, in Indonesia an analysis of gender relations, norms, values and practices that maintain gender inequities and assessment of implications for forest management structures is expected to stimulate change.

Over the past years two rather different streams of work on the broad concept of Payments for Environmental Services have converged, on a view where both economic and social perspectives add value in a socio-ecological system analysis. Combined insights are used to support analysis of emerging practice in China, Indonesia, Vietnam, Philippines, with further attention to the gender aspects of such schemes, the way they are designed, evaluated and interpreted.

3.3. Actively learning landscapes where innovative response and policy options are being tested	**Objectives pursued:** we will continue to interact with local partners in the learning landscape networks, where local and external stakeholders negotiate and have access to a range of conditional and performance-based gender-sensitive arrangements that support the provision and	**Expected outputs :** • Network of 'active learning landscapes' on RES/PES mechanisms maintained and enhanced • Synthesis from action research sites, identifying principles, methods and processes	Total: 1,635 W1/2: 575 Gender: 196

maintenance of environmental services and biodiversity in productive landscapes

This work targets the identification of opportunities for win-win solutions in restoration contexts are fully used, while the hard tradeoffs are recognized and contest over them is replaced by negotiation

Geographical locations of the work: Indonesia, Vietnam, Philippines, China, DRC, Burkina Faso, Cameroon, Dominican Republic, Costa Rica, Colombia, Bolivia

Types of methods used: interactions of science, local and public/policy knowledge systems with synthetic products for tradeoff analysis, visualization of options and scenarios, and negotiation support processes

Gender research dimension (if relevant): Synthesis of women's role in the implementation of payment for environmental services activities in four ecologies and its impacts on livelihoods

for advancing conservation, use rights and livelihood values

- Identification of improved modalities and approaches to effectively support conservation in forest landscape mosaics

- Participatory models for reserve management: resource use rights, threats to targeted species, guidelines for monitoring

- Impact studies testing assumptions of the CRP6.3 theory of change and output-outcome-impact pathways

Progress towards Outcomes in 2016:

Further synthesis of the learning landscape networks and active roles in the ES Partnership leads to new outputs that will be actively shared. The experience in the 'Model Forest' networks in Africa, the Tropenbos country networks and the RUPES/PRESA learning landscapes is first of all shared within each network and supports the learning landscapes as outcomes in their own right, but the more critical articulation of 'theories of place' helps in cross-site learning.

Beyond established networks a further analysis jointly with the RRI partnership shares research results in relation to forest rationalization, degazettement and land reform, with active tests of new land and landscape governance models

In a number of landscapes the Participatory Monitoring by Civil Society of Land-use Planning for Low-Emissions Development Strategies project has helped us gain experience with capacity building at levels that connect villages with local government agencies, and that make the abstract concepts of carbon stocks and ecosystem services tangible and concrete at local level. The lessons learned in this project will be shared more widely

		for broader outcomes in learning landscapes elsewhere.	
3.4. Integration into relevant policies of the contribution FT&A make at landscape level to food security across forest transition stage	**Objectives pursued:** we further target policies on food security that recognize the contribution forests, trees and agroforestry make at landscape level across forest transition stages **Geographical locations of the work:** Honduras, Peru, Cameroon, Uganda, India, Cambodia, Indonesia, Zambia **Types of methods used:** Ex-ante trade off analysis and scoping studies **Gender research dimension (if relevant):** Systematic review of data to assess **the** effect of gender disparities on household food and nutrition security in forested landscapes	**Expected outputs:** • Engaging partners and policy makers for integration of environment, agriculture and nutrition • Gaps in understanding the role of forest-based ecosystem services for agriculture identified • Impacts on smallholder agriculture and environment of agri-business expansion evaluated • Investigating relationship between tree cover and diets and nutrition • Assessment of landscape configurations functional for integrating environmental and agricultural benefits • Understanding broader social context (gender) impact on forests and food security **Progress towards Outcomes in 2016:** Research that analyzed the way an increase in agrobiodiversity in patios and home-gardens in 5000 households enhances food and nutritional security is under way in two key landscapes in Central America. Quantification of links between nutrition and tree cover is under way and starts to inform local stakeholders in Burkina Faso, Ethiopia, Cameroon, Uganda and Zambia. Scoping studies of land sparing/sharing options have been completed in six landscapes: Nicaragua, Cameroon, Burkina Faso, Zambia, Ethiopia, Indonesia, and results are being discussed beyond the direct researchers involved.	Total: 1,747 W1/2: 575 Gender: 210

| 4.1 Harnessing forest; trees and agroforestry for climate change mitigation | **Objectives pursued:** Generate information and knowledge to support policy process and the implementation of more carbon-effective, cost-efficient and equitable (3E) REDD+, incl. better understand livelihoods and practices in swidden landscapes, and their relevance to REDD+; provide decision makers at sub-national level with tested tools for their needs on monitoring carbon sequestration in forest and agroforestry systems [in Indonesia]; generate emission factors and scenarios of activity in the coastal wetlands; build national and sub-national capacity in using 2013 IPCC Wetland Supplement; develop the official Forestry NAMA report for Colombia; enhance viable community forest enterprises (CFE) with sustainable livelihoods and environmental benefits through performance-based public finance and support mechanism; contribute to the development of National Agroforestry Policy of Nepal

Geographical locations of the work: Burkina Faso, Brazil, Cambodia, Cameroon, Colombia, Costa Rica, Gabon, Ghana, Honduras, India, Indonesia, Kenya, Laos, Mexico, Micronesia, Mozambique, Nepal, Papua New Guinea, Peru, Philippines, Senegal, Tanzania, Vietnam

Types of methods used: Literature review, livelihoods household surveys, social network analyses, qualitative data analyses, action research workshops, qualitative survey analyses, model verification, stakeholder interviews, multi-stakeholder workshops and meetings, capacity-building and trainings, field research

Gender research dimension (if relevant): Dryad requires that at least 40% of the Community Forestry Enterprises (CFE) members who become qualified in using and maintaining Field Monitoring System (FMS) equipment are women. | **Expected outputs:**
• Analytical papers and policy brief on REDD+ benefit sharing, and synthesis of lessons from benefit sharing experiences in other sectors published
• Indonesia's National Carbon Accounting System (INCAS) tool is complete and handed over in full to the Government of Indonesia to own, use and continue to develop
• Governance monitoring tool developed; MRV tools used for terrestrial ecosystems across scales compiled
• Report on monitoring system for community forests and community forest enterprise developed and piloted
• Papers on managing terrestrial carbon stocks through long-term rotation of logging in mangrove forest and on the origin and burial rates of carbon stored in tropical mangrove soils published
• Report on the effects of peat forest degradation on carbon stocks and the GHG exchange published
• Global distribution map of organic soils and estimate carbon stock for wetlands and peatlands published
• NAMA for Colombia published
• Report on National Agroforestry Policy of Nepal published

Progress towards Outcomes in 2016

Refined carbon accounting tools to improve MRV and governance at sub-national level.

Indonesia's National Carbon Accounting System (INCAS) tool is complete and handed over in full to the Government of Indonesia to own, use and continue to develop. | Total: 9,342

W1/2: 767

Gender:1,121 |

	This is important because using FMS properly is the key to securing future finance disbursements; CFE members who understand how to use the equipment are thus central to the financial security of the enterprise and thus integral to its management. Gender will also constitute an important factor in the choice of Implementing Organizations and CFEs to be engaged in the project. The project will also produce a brief on mainstreaming gender into REDD+ lessons learnt for Indonesia.	NAMA for Colombia is registered with the United Nations and developing a profile of the NAMA for the Green Climate Fund. Implementation Organization Engagement and Pre-Investment Engagements with at least 5 Community Forestry Enterprises (CFE)	
4.2 Enhancing climate change adaptation through forests, trees and agroforestry	**Objectives pursued**: Adaptation mechanism to droughts and fires in tropical peatlands developed; Climate-change vulnerability of female and male farmers assessed and synthesis created of local ecological knowledge that reduces vulnerability; Climate-smart, tree-based, good adaptation practices are devised by local communities with co-investment by beneficiaries in the accompanying environmental benefits; synthesize and review climate change models in relation to impact on cocoa, oil palm and timber species. **Geographical locations of the work**: Indonesia, Peru, Philippines, Vietnam **Types of methods used**: Research on the effectiveness of governance instruments is based on policy analysis complemented with value chain analysis, and actor mapping, and understanding of different actors in the markets through structured and semi-structured interviews. Assessment of institutional arrangements relies on qualitative information based on interviews, focus groups, political economic analysis, nursery development plot **Gender research dimension (if relevant)**: The project identifies different role and perspectives of female and male smallholders in managing their agricultural land. The project develops co-	**Expected outputs:** • Training on co-investment activities with the smallholders conducted in the three sites • Lessons learnt will be shared through communication measures, such as blogs, articles, and policy briefs, this is expected to mainstream the project goals to improve smallholders livelihood and maintain the ES to the local, national, and global policy makers • Report on extreme weather events and peat fires in West Kalimantan (Indonesia) published • Adaptive strategies towards risk of food insecurity in a context of climate variability published • Case studies on climate and social vulnerability in forested landscapes published • Manual on conducting vulnerability assessments published **Progress towards Outcomes in 2016** The activities under the co-investment of Ecosystem services will improve the biodiversity and ecosystem services on the sites in three countries	Total: 1,424 W1/2: 767 Gender:171

	investment of ecosystem services schemes that recognize and apply the gender characteristics within the project activities.	Capacity for disaster risk management in highly vulnerable areas increased	
4.3 Understanding the role of forests, trees and agroforestry in achieving synergies between climate change mitigation and adaptation	**Objectives pursued**: Trade-offs and synergies between adaptation and mitigation in policies and practice analysed; and their contribution to climate change policy. Suitable crop for bioenergy production on degraded land identified that can contribute to combating climate change while also producing a variety of socio-economic and environmental benefits to rural communities. The policy landscape for synergies between M&A and the inefficiencies of segregated approaches understood. Land-use planning for low-emissions development developed. Climate change impacts on terrestrial ecosystems in Lower Mekong Basin assessed **Geographical locations of the work**: Burkina Faso, China, Costa Rica, Ethiopia, Indonesia, Peru, Sierra Leone, Tanzania **Types of methods used**: Literature review, policy analysis, document analysis, stakeholder consultation, field trial and measurement, capacity strengthening programs on land use planning for low emission development, spatial analysis, land use modelling, estimation of key environmental services (carbon, biodiversity, hydrology), modelling, policy analysis, database analysis, geospatial analysis - climate modelling, field survey, data preparation, statistical analysis **Gender research dimension (if relevant)**: Specific attention is given to capacity strengthening programs that focus on facilitating working groups, building networks and conducting training throughout the target areas, which will strengthen civil society and governments'	**Expected outputs:** • Land Use Planning for Multiple Environmental Services (LUMENS) tool, the manual and policy brief published; training session on land use planning for multiple environmental services delivered and policy dialog on low emission development conducted • Papers and brief on an evaluation of major bioenergy crops suitable for degraded and marginal lands in Indonesia published • Paper on mechanisms to promote synergies between adaptation and mitigation to climate change published • Newsletter and tool on civil society's capacity to participate and monitor the implementation of low-emission development plans published • Journal article on biodiversity based value chains including the case study on Kasigau carbon credit VC. The article will pay attention to the adaptive value of the development of REDD+ value chains **Progress towards Outcomes in 2016** Opportunities to utilise degraded and marginal land for bioenergy production and supports sustainable and equitable resource management at local and sub-national; and plantation trial established Key local governments have the capacity to develop integrated low-emissions development plans as part of Indonesia's nationally appropriate mitigation actions.	Total: 3,708 W1/2: 767 Gender:445

	capacities with a special focus on ensuring representation of women, the poor and marginalised groups		
5.1. investment strategies and business models	**Objectives pursued**: Research findings inform private sector initiatives and sustainability platforms on policies, strategies and business models with potential to enhance social and environmental outcomes in key select commodities (e.g. oil palm, sugarcane, beef, timber, cacao) **Geographical locations of the work**: Brazil, Cameroon, Colombia, DR Congo, Indonesia, Mozambique, Tanzania **Types of methods used**: Quantitative analysis based on data from household surveys, company questionnaires, complemented with qualitative analysis of information gathered through interviews to traders and other key stakeholders. Additional spatial analysis of factors shaping investments. Case studies and comparative analysis of crop expansion dynamics and their impacts. **Gender research dimension** (if relevant): Assess the implications of select investment strategies and business models from a gender perspective, focusing particularly on implications for women's access and command over land and forest resources; decent employment for women; and women's capabilities more broadly. Drawing on ongoing research on gender dimensions of oil palm expansion in Indonesia, evaluate the implications Roundtable on Sustainable Palm Oil (RSPO) principles and guidelines for enhancing women's role in oil palm production systems and safeguarding women's rights. Draw on evidence generated through the study and subsequent assessment to inform RSPO principles and guidelines, social auditing mechanisms, and relevant RSPO governance platforms.	**Expected outputs:** • Select investors acknowledge on options of commercially viable business models that deliver improved outcomes for environmental sustainability and social inclusion • Analysis on the conditions under which different types of business models can best contribute to inclusive and sustainable development, with focus on select countries and commodities with potential to reduce deforestation and enhance peoples' livelihoods • Systematic review of business models with potential to deliver improved social and environmental outcomes in the agriculture and forestry sector • Business platforms and multi-stakeholder processes informed on options for overcoming challenges from commitments to sustainability, with emphasis on 'zero deforestation' pledges **Progress towards Outcomes in 2016** Select investors acknowledge options of inclusive business models in select sectors and value chains (e.g. oil palm, beef, cacao) and consider adjustments in their operations to enhance sustainability National and international business platforms (e.g. IPOP in Indonesia, TFA 2020), national and international multi-stakeholder processes (e.g. GTPS in Brazil, RSPO) consider the risks and options of zero deforestation pledges, along with their social and environmental trade-offs	Total: 2,292 W1/2: 767 Gender:275

5.2. governance systems and institutional arrangements	**Objectives pursued**: Contribute to improve the effectiveness of state regulations, market-based mechanisms, and public-private institutional arrangements at multiple levels to ensure improved sustainable commodity supply and benefit sharing from forest products and agricultural commodities **Geographical locations of the work**: Brazil, Cameroon, Congo, DR Congo, Gabon, Indonesia, Peru **Types of methods used**: Research on the effectiveness of governance instruments is based on policy analysis complemented with value chain analysis, and actor mapping, and understanding of different actors in the markets through structured and semi-structured interviews. Assessment of institutional arrangements relies on qualitative information based on interviews, and focus groups, complemented with political economic analysis to determine outcomes and trade-offs. **Gender research dimension** (if relevant): Develop and implement a conceptual and methodological framework for embedding a strong gender perspective into the research on effectiveness of governance and assessment of institutional arrangements.	**Expected outputs:** • Identified the trade dynamics and flows, and quantified the domestic demands for legal sawn wood in select countries in Central Africa region • Informed multi-stakeholder processes and national policy dialogues for strengthening small and medium forestry enterprises in Central Africa • Examined the impacts of forest reforms in smallholder forestry in Western Amazon, and the options for supporting improved forest management • Analyzed business strategies and voluntary initiatives for sustainable value chains when adopting a territorial perspective in the case of the Brazilian Amazon **Progress towards Outcomes in 2016** Distilled lessons on the regulatory options to enhance smallholder forestry and SMEs in the context of policy strategies aimed at reducing informality and illegality Market regulations affecting timber legal supply (FLEGT) consider better options to reduce likely negative impacts from greater integration of domestic timber sector Analysis on the perspectives to harmonize international sustainability standards (e.g. RPSO) with national standards (e.g. ISPO) under wider articulation of public-private governance arrangements	Total: 2,463 W1/2: 767 Gender:296
5.3. Securing tenure and rights of resource users	**Objectives pursued**: Research and action will generate evidence on: a) whether and how tenure and property regimes affect resource sustainability, local livelihoods, and benefits distribution	**Expected outputs:** • Analysis and synthesis of the impacts of tenure on sustainable use and management,	Total: 891 W1/2: 767

across forest and tree landscapes	individually and jointly, with consideration of trade-offs; b) factors conditioning tenure security; c) constraints and opportunities of tenure reform implementation processes. New and/or existing knowledge will be consolidated and used to inform decision making and priority setting among policy makers and practitioners at global, regional, national and sub-national levels. **Geographical locations of the work**: Indonesia, Kenya, Nicaragua, Peru, Uganda, **Types of methods used**: Systematic reviews, surveys of households and communities, stakeholder analyses and workshops, policy roundtables, gender analysis **Gender research dimension** (if relevant): Analysis of gender differentials in access and control over resources, benefits capture and tenure decision processes will be conducted with a view to: a) informing policy makers and practitioners; and b) identifying ways and means of strengthening tenure rights of women and other marginalized groups.	livelihoods, benefits capture and gender inclusion • Analysis of factors influencing forest and tree tenure security • Policy makers and practitioners share experiences on factors constraining or enabling implementation of tenure reform initiatives **Progress towards Outcomes in 2016** Conceptual framework, methods and data for tenure security assessments developed/generated and shared with policy makers and practitioners. Global, national and sub-national platforms leveraged to inform multiple stakeholders and to consolidate lessons learned from years of tenure reform implementation	Gender: 107
Gender Integration Team - cross cutting	**Objectives pursued:** Support the integration of gender analysis and research into each of the five flagship projects of the CRP6 by: deploying gender analysis methods, partnerships and alliances, knowledge sharing, and adaptive learning to effectively incorporate gender in the research cycle and; prioritizing and increasing the number of gender strategic research that aimed at enhancing women's control over resources and women's participation in decision-making. **Geographical locations of the work:** Global **Types of methods used:** Guidelines and tools, trainings and workshops on gender concepts and methods, tailored support to research teams and	**Expected outputs :** • Capacity development of scientists and partners in gender concepts, frameworks and methods: Toolbox on gender and intersectional analysis and a tool on gender-responsive data dissemination • Strategic gender research and targeted support for gender analysis: 7 country datasets, 7 papers and 2 briefs on gender related issues within flagship themes • Adaptive learning: Conference on gender knowledge to action with partners, a brief on the use of mixed methods in MEIA and annual	Total: 1.363 +bits embedded in CoA work W1/2: 800

	proposal design, assessment tool for gender integration, participatory research methods.	monitoring of the level of gender integration in FTA	
		• Knowledge sharing, including synthesis of lessons across specified themes of forest use and management, climate change and value chains;	
		• Communications: quarterly newsletter, updated gender website, blogs	
		Progress towards Outcomes in 2016	
		New capacity development tools on gender and emergent issues like intersectional analysis and the consolidation of communities of practice around gender strengthen institutional capacities for gender research and gender analysis.	
		Tailored support in gender analysis across flagships enabled ongoing influence in the overall FTA research agenda, supported substantive achievements in understanding and addressing key institutional, cultural and attitudinal contexts that determine gender inequity, and informed governmental and non-governmental decision-making.	
Communication/ outreach cross-cutting	**Objectives pursued:** Raise awareness of CRP-FTA among key target stakeholders. Use cutting-edge communications and knowledge sharing to create impact pathways for CRP-FTA research. **Geographical locations of the work:** Global **Types of methods used:** The program is web-centric and combines contemporary social media tools with traditional outreach channels. **Gender research dimension (if relevant):** Many of the outputs have a strong focus on gender.	**Expected outputs :** • Blogs: 345 articles written and posted • Media outreach: 36 media outreach activities • Social media: Targeted 20% growth in followers on Facebook & LinkedIn • Powerpoints: 60 Powerpoints on FTA research collected from scientists and uploaded to Slideshare • Videos: 23 videos produced on FTA research	Total: embedded in CoA work W1/2: 310 (for the CCT elements)

		• Photos: 1,000 photographs related to FTA research collected and posted to Flickr • Events: 18 events at which FTA research will be presented and/or have a booth or other substantive presence • Website: FTA website updated and improved • E-newsletter: Quarterly FTA e-newsletter launched and disseminated	
Monitoring, Evaluation and Impact Assessment	**Objectives pursued**: Monitor, evaluate, and assess the outcomes and impacts of FTA research; develop the capacity of scientists in planning for and monitoring success in achieving outcomes and impacts. **Geographical locations of the work**: Indonesia, Malawi, Guinea, Congo Basin. **Types of methods used**: econometrics analysis, global macro models, outcome assessment, influence logs, event feedback, semi-structured interviews, surveys. **Gender research dimension (if relevant):** Outcomes and impact assessment tools and guidelines will observe differential effects on men and women from different socio-economic groups	**Expected outputs :** • Refined MEIA strategy, guidelines and tools • MEIA studies: impact assessment of the Malawi Agroforestry for Food Security project; impact assessment of LAMIL project in Guinea; outcome assessment of capacity development in Africa **Progress towards Outcomes in 2016:** Improved capacity of scientists to design projects and document achievements. FTA stakeholders are informed on the outcomes and impact of FTA.	Total: 1.335 + bits embedded in CoA work W1/2: 290
Capacity Development CCT	**Objectives pursued:** Developing future research leaders through integration of MS and PhD students from partner universities into research projects, developing scientific capacity through projects specifically aimed at doctoral and post-doctoral female scientists, being host to visiting scientists and sending staff associated with FTA as visiting scientists to partner research institutions; Harmonization of CapDev approaches amongst FTA Partners: Best practices regarding MS and	**Expected outputs:** • An internal report on best practices for cross learning published • A searchable learning resource repository of FTA generated capacity development products (manuals, tools, guides) globally on internet • GTA team supported in capacity related issues	Total: embedded in CoA work W1/2: 80

| | PhD fellowship programs established and integrated into Good Practice Guide for FTA flagships

Developing and delivering learning content and approaches for scientific as well as managerial, practitioner's, civil society organizations, and farmer's capacity and making this available through web based repositories.

Geographical locations of the work: Global, Indonesia

Types of methods used: Various, participatory, workshops, brainstorming

Gender research dimension (if relevant): CapDev methodological support to Gender Team provided | • Systems for systematic monitoring, evaluation and learning (MEL) and research about capacity development established and made function across FTA's

• Capacity related data collection and management streamlined across FTA participating centers and data shared at FTA level.

• Knowledge related capacity needs of up and outscaling (boundary partners) assessed and considered in the design of Phase II | |

Table 2 – Planned CRP gender research budget: expected gender research results and associated budget

Level of organisation within the CRP	Expected Gender research results as described in Table 1	Planned gender research budget ($ 000s)
Level n-1: Flagship Projects that contribute to the CRP gender IDO	Expected progress toward the CRP's gender IDO and if relevant other IDOs that have gender equity dimension. Indicate, where relevant, the geographical areas of focus	Indicate the funds planned

and if relevant other IDOs that have a gender dimension Use one row per Flagship (same numbering system as in Table 1) and indicate for each Flagship the type of expenses concerned (e.g., capacity strengthening in gender research, collaboration with other CRPs,...) **so it is clear there is no double counting with funds in the Clusters of activities below**		for gender research in each Flagship, which are **in addition** to the funds in the Clusters of activities. **No double counting please.**
Flagship 1: Enhancing how trees and forests contribute to smallholder livelihoods	**Progress toward IDO:** We address gender equality globally, positioning it as an entitlement and not just a means to sustainable development through an assessment of the UN Women's Report on Gender Equality and Sustainable Development. We take specific steps to strengthening women's participation in forest management in Uganda and link gender and migration with forest governance in relation to community forestry policies in Nepal. We explore the pivotal role that women play in agroforestry product value chains in Sulawesi and the implications of transactions across genders at the production-marketing and marketing-trading interfaces. We develop stakeholder engagement to generate more inclusive agroforestry options in DRC with specific reference to women and indigenous people. **Geographical areas(if relevant)** : Nepal, Uganda, Indonesia, DRC and global	Total: 1.986
Flagship 2: Forest management and conservation of biodiversity resources	**Progress toward IDO:** This research contributes to the three IDOs related to SLO 'Improved natural resource systems and ecosystem services', but also specifically to achieving the IDO 'Equity and inclusion achieved'. Using mixed methods, including participatory research approaches involving female and male participants, women and tribal groups in India are gaining awareness, capacity and influence in joint forest management, thereby improving their capacity to participate in decision-making (sub-IDO). Results from studies on gender norms shaping fruit tree management in Kyrgyzstan have been discussed with (state) Forestry Enterprise officials, researchers, NGOs, and village	Total: 825

	leaders to enhance women's participation in trainings, and in subsequent decision-making processes related to tree management in homesteads and in the forest **Geographical areas(if relevant)** Strategic gender research is focused in India and Kyrgyzstan. Projects with a strong gender dimension also occur in Burkina Faso, Cameroon and Guatemala. Gender-responsive research occurs in all the countries listed in the FP2 portfolio.	
Flagship 3: Landscape management for achieving sustainable development goals (incl. Sentinel Landscapes)	**Progress toward IDO:** Consolidation of information on to what extent and how women access forests for food; how forest foods are distributed at the intra-household level; and whether women benefit from access to forest foods. Inform policies on the relative importance of forests for women and for promoting food security at the intra-household level. Local governments in >5 countries start using a new FTA-developed framework for planning land use for sustainable development with multiple environmental services, integrating low emission development, buffering against extreme events, biodiversity conservation, restoration options and adaptation in a gender-sensitive context Development agencies in >5 countries start using sentinel landscape characterization data for planning gender-sensitive sustainable development interventions in the established broad domains of similarity. **Expected outputs** • Gender involvement on local environmental payment schemes. • Gender-sensitive local knowledge to reduce vulnerability and increase adaptive capacities to climate change and other shocks • Climate change mitigation and adaptation - Contribute to IFAD's global and national strategy on pro-poor, climate-smart, tree-based agriculture • Nutrition-sensitive landscapes **Geographical areas(if relevant):** Sentinel Landscape countries, Indonesia, Cameroon, DRC, Peru. Global	Total: 1.254
Flagship 4: Climate change adaptation and mitigation using FT&A	**Progress toward IDO:** Gender dimension is integrated in research activities which aim to empower and reduce impacts of vulnerable groups, and provide information for policy processes. Gender mainstreaming in REDD+ requires not only a policy on gender equity, but also political will and sufficient capacity in government agencies at various levels of governance.	Total: 1.737

	Lessons learnt from the development of gender-sensitive co-investment of ecosystems services to support climate change adaptation and mitigation in national/subnational levels; the project identifies different role and perspectives of female and male smallholders in managing their agricultural land, public or private actors promote more climate change resilient systems and practices for at least one commodity crop, and better adaptation policies and practices in forests.	
	Indonesia's locally appropriate mitigation actions (LAMA-I) aim to strengthen the capacity of key local governments in Indonesia to develop integrated low-emission development plans as part of NAMA. It has been building capacity both technically and institutionally, and ensure representative of woman in all activities. Civil society's capacity to participate and monitor the implementation of low-emission development plans are strengthened.	
	Gender balance in the research team maintained.	
	Expected outputs • Brief on developing indicators for mainstreaming gender into REDD+ lessons learnt for Indonesia • Working paper on the role of female and male farmers in domestic and agriculture activities • Blog articles about this activities and achievement • Tool for Land Use Planning for Multiple Environmental Services (LUMENS), including manual and newsletter	
	Geographical areas: Global, Africa, and Latin America Sentinel Landscapes; Bolivia, Brazil, Burkina Faso, Cameroon, Central African Republic, Cote d'Ivoire, Colombia, Democratic Republic of Congo, Ecuador, Equatorial Guinea, Ethiopia, India, Indonesia, Kenya, Laos, Malaysia, Mexico, Mozambique, Nepal, Papua New Guinea, Peru, Philippines, Rwanda, Tanzania, Uganda, and Vietnam.	
Flagship 5: Global Governance, Trade and Investment	**Progress towards IDO** Gender-explicit analysis is integrated in research on global governance, trade and investment with potential to inform differentiated policies to reducing impacts in most vulnerable groups.	Total: 677
	Impacts of trade and investment on women's empowerment and gender equality is better understood	
	Opportunities for enhancing greater equity through gender responsive regulations, corporate practices and institutional arrangements are identified	
	Identified ways and means of strengthening tenure rights of women and other marginalized groups	

	Expected outputs	
	Expected outputs • Research paper and blog assessing impacts of business models related to investments in select agricultural commodities targeting both national and international markets; presentation in a relevant policy platform. • Report (internal review) about embedding gender perspective in research framework and methodology • Sex disaggregated data sets with regards to: b) GCS-tenure projects; • Working paper focused solely on gender and tenure. • Several technical reports, working papers and workshops including a gender dimension **Geographical areas(if relevant)** Select countries in Eastern and Central Africa, Latin America and Southeast Asia	
Gender cross cutting and gender elements of Sentinel Landscapes and Management Support Unit	See in FP and CoA sections for details	Total: 1.363
Level n-2: Cluster of activities Use one row per relevant Cluster of activities	**Expected research outcomes and outputs that have a gender/equity dimension** (from Table 1)	Indicate the funds planned for gender research
	Information already provided in the CA sections	
	TOTAL GENDER BUDGET FOR THE CRP **7.842 (13% of total CRP)**	